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A Survey of Braconinae (Hymenoptera, Braconidae) of Turkish Western Black Sea Region

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A b s t r a c t : From Turkish Western Black Sea region are recorded 62 Braconinae species of genera *Glyptomorpha* HOLMGREN, *Pseudovipio* SZÉPLIGETI, *Vipio* LATREILLE, *Ceratobracon* TELENGA, *Bracon* FABRICIUS and *Pigeria* ACHTERBERG. All the species are new to the fauna this region and 21 them are new to the fauna of Turkey.

K e y w o r d s : Braconinae, Braconidae, Hymenoptera, Western Black Sea Region, Turkey.

Introduction

Braconinae is the largest subfamily of Braconids, comprising hundreds of genera and about 2500 species, mostly in the tropics. This subfamily includes the largest Braconids: In the tropics up to 25-27mm, in north up to 15mm. All members of subfamily are predominantly external parasites of concealed larvae of Lepidoptera, Coleoptera, though a few are parasitic on sawflies and Cecidomyiid midges.

The hosts all share a moderate degree of concealment, usually in living plant tissue and typically include inhabitants of tree bark, stems of annual and biennial plants, galls and seed heads or vessels, but some are case-bearers. Leaf rollers and endophytic hosts that are only weakly concealed such as leaf-miners, as well as those living fully concealed in hard wood, are much less regularly attacked.

Several braconines attack economically important hosts: for example some *Bracon* species parasitise forestry pests, and there are other *Bracon* species that attack stored products pests such as flour moths. In warm temperate climates some *Bracon* species regularly parasitise weevil grubs and caterpillars damaging field crops like cotton and maize, including in a few cases more or less exposed noctuid larvae (SHAW M.R. & T. HUDDLESTON 1991).

The Braconinae fauna of Turkey is not well known. Studies on Turkish Braconinae fauna include Mediterranean, Aegean, Marmara and partly East and Southeast Anatolia regions (BEYARSLAN 1986a, 1986b, 1987, 1988, 1991, 1992, 1996, 1999, 2002a, 2002b; BEYARSLAN & FISCHER 1990; BEYARSLAN et al. 2002). Regarding Central Anatolia, only 7 species from province Ankara appear to have been recorded in the literature (GÜLER & ÇAĞATAY 2001).

Material And Methods

The material for the present study was collected by sweep-net from various localities of Turkish Western Black Sea region between 2000 and 2003 (Fig. 1) and sacrificed with ethyl acetate or cigarette smoke. Collected samples were pinned and labelled according to taxonomic rules and regulations. Specimens are deposited in the Zoological Museum of the Department of Biology, Trakya University.

Relevant literature was used for taxonomical examination of materials (ACHTERBERG 1983a, 1983b, 1985, 1988, 1990; ACHTERBERG & QUICKE 1991, CHISTI & QUICKE 1995, PAPP 1997, PAPP 1999a, PAPP 1999b, PAPP 1999c, QUICKE 1987, QUICKE 1991, SHENEFELT, 1978, TOBIAS 1976, TOBIAS 1986). The specimens were identified mostly using the keys by (ACHTERBERG 1990, BEYARSLAN & FISCHER 1990, QUICKE 1987).



Fig. 1: Western Black Sea region of Turkey.

Results

Braconinae

Glyptomorpha (HOLMGREN 1868)

Glyptomorpha pectoralis (BRULLÉ 1832)

Material examined: Cankiri-Ilgaz-Kale, 4.7.2001, 1♀. Karabük-Safranbolu-Incecey-Sariccek dagi, 29.6.2001, 2♀♀, 3♂♂; - Eski Pazar, 28.8.2002, 1♂. Kastamonu-Daday-Ballidag-Kelebek yaylasi, 1.7.2001, 2♂♂; - Daday-Ballidag-Sarpun, 1.7.2001, 1♂; - Hanönü, 2.7.2001, 2♂♂; - Küre-Ersizlerdere 12.6.2002, 5♂♂; Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 1♂; - Boyabat-Salar, 3.7.2001, 1♀.

General Distribution: Palaearctic: Africa, Austria, Asia Minor, Caucasus, Central Asia, China, Greece, India, Kazakhstan, Mongolia, Pakistan, southern part of Western Europe, Southern Russia.

H o s t s : Coleoptera: *Sphenoptera laticollis* OL., *S. gossypii* KERR., *S. montana* JAK., *Chrysobothris affinis* F. (Buprestidae), *Plagionotus arcuatus* L., *Schinocerus speciosus* AD. (Cerambycidae).

***Pseudovipio* SZÉPLIGETI 1896**

***Pseudovipio castrator* (FABRICIUS 1798)**

M a t e r i a l e x a m i n e d : Kastamonu-Azdavay-Mehmetcelebi, 5.9.2001, 1 ♀; - Tasköprü-Alamasisli, 6.9.2001, 1 ♀; - Cide, 10.6.2002, 1 ♀; - Catalzeytin-Köprüköy-10.6.2002, 1 ♀. Sinop-Boyabat-Salar, 3.7.2001, 1 ♀; - Demirci, 7.9.2001, 1 ♀; - Yenicam, 2.7.2001, 3 ♀ ♀, 2 ♂ ♂. Zonguldak-Cukurören, 9.6.2001, 3 ♀ ♀, 1 ♂; - Caycuma-Yolgecen, 9.6.2002, 1 ♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Asia minor, Caucasia, Central Asia, Kazakhstan, Mongolia, Northern Africa, Russia (northern part), South and Middle Europe.

H o s t s : Coleoptera: *Chrysobothris affinis* F., *Buprestis* sp. (Buprestidae), *Lixus junci* BOH. (Curculionidae), *Plagionotus arcuatus* L. (Cerambycidae), Lepidoptera: *Gortyna xentheres* GERM. (Noctuidae).

***Pseudovipio inscriptor* (NEES VON ESENBECK 1834)**

M a t e r i a l e x a m i n e d : Kastamonu-Arac-Toprakcuma, 13.6.2002, 2 ♀ ♀. Karabük-Bostanbükü, 13.6.2002, 1 ♀; - Eskipazar-Ortaköy, 28.8.2002, 1 ♂.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Caucasia, Central Asia, Kazakhstan, Mongolia, Central and South Russia, Western Europe.

H o s t : Lepidoptera: *Ostrinia nubilalis* HB. (Pyraustidae).

***Vipio* LATREILLE 1804**

***Vipio nominator* (FABRICIUS 1787)**

M a t e r i a l e x a m i n e d : Bartın-Camlık, 30.6.2001, 1 ♀; - Kurucasile-Danışment, 9.6.2002, 2 ♂ ♂. Bolu-Düzce-Kabalar, 8.6.2002, 1 ♀; - Siyamoglu, 28.6.2001, 1 ♀, 1 ♂. Karabük-Safranbolu-Incecay-Sarıcecek dağı, 29.6.2001, 4 ♀ ♀, 7 ♂ ♂. Kastamonu-Küre-Ersizlerdere-Ipsinler, 12.6.2002, 2 ♀ ♀, 2 ♂ ♂; - Cide, 10.6.2002, 2 ♂ ♂; - Cide- Danışment, 10.6.2002, 1 ♀. Sinop-Ayancık-Bakirlizaviye, 2.7.2001, 1 ♀; - Demirci, 11.6.2002, 2 ♂ ♂. Zonguldak-Cukurören, 29.6.2001, 2 ♀ ♀, 9.6.2002, 3 ♂ ♂; - Caycuma-Yolgecen, 9.6.2002, 1 ♂.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Azerbaijan, Caucasia, Europe, Kazakhstan, Mongolia, Russia, Syria, Turkey. Neotropic: French Guiana.

H o s t s : Coleoptera: *Acanthocinus griseus* F., *Elateroides dermestoides* L., *Lymexylon navale* L. (Lymexylonidae).

***Vipio tentator* (ROSSI 1790)**

M a t e r i a l e x a m i n e d : Bolu-Siyamoglu, 28.6.2001, 1 ♂. Kastamonu-Küre-Ersizlerdere-Ipsinler, 12.6.2002, 2 ♀ ♀, 2 ♂ ♂. Sinop-Boyabat-Salar, 3.7.2001, 2 ♀ ♀; - Demirci, 3.7.2001, 1 ♂.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Algeria, Azerbaijan, Caucasia,

Corsica, former Czechoslovakia, former Yugoslavia, Hungary, Israel, Italy, Kazakhstan, Rumenia, Russia, Sicily, Tunisia, Turkey.

H o s t : Coleoptera : *Agrilus coeruleus* ROSSI (Buprestidae)

***Ceratobracon* TELENGA 1939**

***Ceratobracon stschegolevi* (TELENGA 1933)**

M a t e r i a l e x a m i n e d : Kastamonu-Ilgaz dagi-Catören, 3.7.2001, 1 ♀; - Hanönü, 2.7.2001, 6 ♀♀, 5 ♂♂; - Tasköprü-Alamasisli, 2.7.2001, 1 ♀, 1 ♂. Sinop-Boyabat-Salar, 3.7.2001, 5 ♀♀; - Kabalı, 3.7.2001, 1 ♀. Zonguldak-Caycuma-Kaykılar, 30.6.2001, 1 ♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Caucasus, Central Asia, Mongolia, Central and South Russia, Turkey.

H o s t : Hymenoptera: *Cephus pygmaeus* L. (Cephidae).

***Bracon* FABRICIUS 1804**

Subgenus *B r a c o n* s.str.: FAHRINGER 1927

***Bracon (Bracon) chagrinicus* BEYARSLAN 2002**

M a t e r i a l e x a m i n e d : Kastamonu-Daday-Ballidag, 1.7.2001, 1 ♂.

General Distribution: Palaearctic: Turkey.

***Bracon (Bracon) exhilarator* (NEES VON ESENBECK 1834)**

M a t e r i a l e x a m i n e d : Kastamonu-Daday-Ballidag- Kelebek yaylasi, 1.7.2001, 1 ♂; - Daday-Incegiz, 1.7.2001, 1 ♀, 4 ♂♂; - Hanönü, 2.7.2001, 4 ♀♀. Sinop-Boyabat-Salar, 3.7.2001, 4 ♀♀; - Kabalı, 3.7.2001, 2 ♀♀.

M a t e r i a l e x a m i n e d : Palaearctic: Eastern Siberia, Kazakhstan, Turkey, Western Europe.

H o s t s : Lepidoptera: *Acleris rhombana* f. *ciliana* HB. (Tortricidae), Coleoptera: *Apion hookeri* KBY. (Curculionidae), Diptera: *Amaurosoma* sp. (Scatophagidae).

***Bracon (Bracon) fulvipes* (NEES VON ESENBECK 1834)**

M a t e r i a l e x a m i n e d : Bartın, 9.6.2002, 1 ♂; - Camlık, 30.6.2001, 1 ♀. Bolu-Aladag-Kökeç, 27.8.2002, 1 ♂. Düzce-Kaynasli-Ucköprü, 27.6.2001, 1 ♀. Kastamonu-Azdavay-Kirazdağı, 5.8.2001, 2 ♀♀, 1 ♂; - Catören, 30.8.2002, 1 ♀; - Azdavay-Mehmetcebi, 5.8.2001, 1 ♂; - Hanönü, 2.7.2001, 2 ♀♀, 1 ♂. Karabük-Cay, 28.8.2002, 1 ♂; 13.6.2002, 1 ♂. Sinop-Yenicam, 2.7.2001, 2 ♀♀, 1 ♂. Zonguldak-Caycuma-Kaykılar, 30.6.2001, 1 ♀, 1 ♂.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Austria, Belgium, England, Finland, France, Germany,

Greece, Holland, Hungary, Italy, Mongolia, Poland, Russia, Spain, Sweden, Turkey.

H o s t s : Coleoptera: *Mononychus punctum-album* HBST. (Curculionidae),

Lepidoptera: *Paranthrene tabaniformis* ROTT. (Sesiidae), *Coleophora coronillae* Z. (Coleophoridae), Hymenoptera: *Tetramesa hyalipennis* WALK., *T. brevicollis* WALK. (Eurytomidae).

***Bracon (Bracon) gusaricus* TELENGA 1936**

Material examined: Kastamonu-Hanönü, 2.7.2001, 1♀, 4♂♂.

General Distribution: Palaearctic: Bulgaria, Central Asia.

New record for Turkey.

***Bracon (Bracon) immutator* (NEES VON ESENBECK 1834)**

Material examined: Bolu-Mengen-Kiyaslar, 28.6.2001, 1♀. Kastamonu-Daday-Ballidag, 1.7.2001, 4♂♂.

General Distribution: Palaearctic: Northern Russia, Northern and Central Ukraine, Western Europe.

New record for Turkey.

***Bracon (Bracon) intercessor* (NEES VON ESENBECK 1834)**

Material examined: Bartın, 9.6.2002, 1♀; - Camlık, 30.6.2001, 1♀; - Kurucasile-Danishment, 9.6.2002, 3♀♀, 1♂. Bolu-Aladag-Ardictepe, 27.8.2002, 1♂. Cankiri-Ilgaz-Kale, 4.7.2001, 1♀. Corum-Kargi, 31.8.2002, 2♀♀. Düzce-Kaynasli-Üçköprü, 27.6.2001, 2♂♂. Karabük-Cay, 28.8.2002, 1♀; - Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1♀, 3♂♂. - Eskipazar-Ortaköy, 28.8.2002, 1♀, 1♂. Kastamonu-Arac-Akgecit, 28.6.2002, 2♀♀; - Cide, 10.6.2002, 2♀♀, 3♂♂; - Catalzeytin-Köprüköy, 10.6.2002, 1♂; - Catören, 30.8.2002, 1♀; - Daday-Ballidag, 1.7.2001, 1♂, 1♀, 28.8.2002, 2♀♀, 1♂; - Daday-Ballidag- Sarpun 1.7.2001, 1♂, 29.8.2002, 1♀; - Daday-Incegiz-Ciflik, 29.8.2002, 1♀, 1♂; - Doğanyurt-Denizbükü, 10.6.2002, 2♂♂; - Hanönü, 2.7.2001, 2♀♀, 2♂♂; - Ilgaz dagi-Catören, 3.7.2001, 1♂; - Inebolu-Yakaboyu, 10.6.2002, 1♀; - Küre-Ersizlerdere, 12.6.2002, 1♀; - Tasköprü-Alamasisli, 6.9.2001, 27♀♀, 18♂♂; - Tosya-Ekinci, 31.8.2002, 2♂♂. Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 1♀; - Demirci, 7.9.2001, 1♀; - Boyabat-Yabanlı, 7.9.2001, 43♀♀, 40♂♂; - Boyabat-Salar, 3.7.2001, 3♀♀, 5♂♂; - Kabalı, 3.7.2001, 2♀♀, 1♂; - Saraydüzü-Yalmansaray, 31.8.2002, 1♀; - Yenicam, 2.7.2001, 1♂. Zonguldak-Cukurören, 29.6.2001, 5♂♂; - Cukurören, 9.6.2002, 1♂; - Devrek, 28.6.2001, 3♀♀, 1♂; - Devrek-Davulga, 29.6.2001, 3♀♀; - Karadeniz Ereğlisi, 8.6.2002, 1♀, 3♂♂.

General Distribution: Palaearctic: Austria, England, former Yugoslavia, France, Germany, Hungary, Italy, Kazakhstan, Poland, Spain, Sweden, Turkey.

Hosts: Coleoptera: *Rhynchites bacchus* L. (Attelabidae), *Microlarinus lypriformis* WOLL., *M. lareyniei* JACQ., *Anthonomus pomorum* L., *A. pedicularis* L., *A. sorbi* GERM., *Apion opeticum* BACY., *Lixus junci* BOY., (Curculionidae), Lepidoptera: *Parametriotes theae* KUZN. (Mompshidae), *Augasma atraphaxidellum* KUZN., *Sparganothis pilleriana* DEN. & SCHIFF. (Tortricidae), Hymenoptera: *Tetramesa hyalipennis* WALK., *T. rossica* R.-K. (Eurytomidae).

***Bracon (Bracon) kozak* TELENGA 1936**

Material examined: Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 1♀.

General Distribution: Palaearctic: Caucasia, Central Asia, Moldavia.

New record for Turkey.

***Bracon (Bracon) leptus* MARSHALL 1897**

Material examined: Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 2♀♀, 1♂. Sinop-Yenicam, 2.7.2001, 2♀♀.

General Distribution: Palaearctic: Central Asia, Eastern Siberia, Southern and Central Caucasia, Kazakhstan, Western Europe.

Host: Lepidoptera: *Metzneria lappella* L. (Gelechiidae).

New record for Turkey.

***Bracon (Bracon) longicollis* WESMAEL 1838**

Material examined: Bartın, 9.6.2002, 1♂; - Amasra, 9.6.2002, 1♂; - Kurucasile-Danışment, 9.6.2002, 2♀♀. Bolu-Caydurt, 28.6.2001, 1♀; - Mengen-Kıyaslar, 28.6.2001, 1♀, 2♂♂; - Aladag-Kökeç, 27.8.2002, 1♂. Çorum-Kargı, 31.8.2002, 5♀♀. Kastamonu-Daday-Ballıdag-Sarpun, 1.7.2001, 1♂; - Daday-Incegiz-Ciftlik, 29.8.2002, 1♀, 2♂♂; - Hanönü, 2.7.2001, 2♀♀; - Tasköprü-Alamasıslı, 2.7.2001, 1♀; 6.9.2001, 1♀; - Ballıdag, 29.8.2002, 1♂; - Akkaya, 31.8.2002, 1♂; - Ilgazdağı, 30.8.2002, 1♀. Karabük-Cay, 28.8.2002, 1♀, 2♂♂; - Eskipazar-Ortaköy, 28.8.2002, 1♀, 1♂; - Bostanbükü, 28.8.2002, 1♀, 2♂♂. Zonguldak-Devrek-Davulga, 29.6.2001, 2♂♂.

General Distribution: Palaearctic: Caucasus, Central Asia, Iran, Kazakhstan, Mongolia, Siberia, Western Europe.

New record for Turkey.

***Bracon (Bracon) luteator* (SPINOLA 1808)**

Material examined: Bolu-Aladag-Kökeç, 27.8.2002, 1♀, 1♂. Kastamonu-Azdavay-Catören, 3.7.2001, 1♂; - Azdavay-Mehmetcebi, 5.9.2001, 1♂; - Tosya-Ekinci, 31.8.2002, 1♀; - Kanlıgöl-M.Parkı, 28.8.2002, 1♀; - Daday-Incegiz-Ciftlik, 29.8.2002, 5♀♀, 2♂♂. Karabük-Eskipazar-Ortaköy, 28.8.2002, 2♀♀; - Safranbolu-Saricicek dagi, 4.9.2001, 1♂. Sinop-Yenicam, 6.9.2001, 1♀, 1♂; - Boyabat-Yabanlı, 7.9.2001, 1♂.

General Distribution: Palaearctic: Austria, Azerbaijan, Caucasia, Central Asia, Crimea, England, former Yugoslavia, France, Greece, Hungary, Iran, Israel, Italy, Kazakhstan, Russia, Sicily, Spain, Sweden, Turkey, Turkmenistan, Ukraine.

Hosts: Lepidoptera: Associated with Compositae (*Centaurea*, *Oirsium*, *Carduus*), in their heads infecting larvae of *Metzneria aestivella* Z., *M. lappella* L. (Gelechiidae). Diptera: *Urophora solstitialis* L. (Tephritidae).

***Bracon (Bracon) mariae* DALLA TORRE 1898**

Material examined: Bolu-Siyamoglu, 28.6.2001, 1♂.

General Distribution: Palaearctic: Algeria, Crimea, former Yugoslavia, Hungary, Italy, Russia, Spain, Sweden, Switzerland, Turkey.

***Bracon (Bracon) minutor* (FABRICIUS 1798)**

Material examined: Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1♀. Kastamonu-Daday-Incegiz, 1.7.2001, 1♀; - Hanönü, 2.7.2001, 1♀. Sinop-Boyabat-Salar, 3.7.2001, 1♀; - Demirci, 3.7.2001, 1♀; - Kabalı, 3.7.2001, 1♀; 11.6.2002, 1♀. Zonguldak-Devrek-Davulga, 29.6.2001, 1♀.

General Distribution: Palearctic: Austria, Belgium, Caucasia, Denmark, England, Finland, former Yugoslavia, Germany, Greece, Hungary, Italy, Kazakhstan, Poland, Russia, Siberia, Turkey.

Hosts: Lepidoptera: *Rhyacionia buoliana* DEN. & SCHIFF., *Leguminivora glycinivorella* MATS., *Cochylis posterana* Z. (Tortricidae), *Pennisetia hylaeiformis* LASP. (Sesiidae), *Caloptilia syringella* F. (Gracillariidae), *Mesapamea secalis* L., *Oria musculosa* HB., *Sesamia nonagrioides* LED. (Noctuidae), Coleoptera: *Anthonomus pomorum* L. (Curculionidae), Diptera: *Lipera lucens* MG. (Chloropidae), Hymenoptera: *Cephus pygmaeus* L. (Cephidae).

***Bracon (Bracon) nigratus* WESMAEL 1838**

Material examined: Bartın-Camlık, 30.6.2001, 1♀. Kastamonu-Azdavay-Mehmetcebi, 5.9.2001, 1♀.

General Distribution: Palaearctic: Western Europe, North and Central Siberia.

Hosts: Lepidoptera: *Grapholitha compositella* F. (Tortricidae), *Coleophora millefolii* Z. (Coleophoridae), *Zygaena achilleae* ESP. (Zygaenidae), *Chaetostomella cylindrica* R.-D. (Tephritidae).

New record for Turkey.

***Bracon (Bracon) pectoralis* (WESMAEL 1838)**

Material examined: Bartın-Kurucasile-Danışment, 9.6.2002, 1♀. Bolu-Siyamoglu, 28.6.2001, 1♀. Cankiri-Cerkes, 4.7.2001, 1♀. Düzce-Kaynasli-Üçköprü, 27.6.2001, 1♀. Kastamonu-Doğanyurt-Denizbükü, 10.6.2002, 1♀; - Tosya-Ekinci, 31.8.2002, 1♂, 1♀. Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 1♀. Zonguldak-Cukurören, 29.6.2001, 1♂; - Devrek, 28.6.2001, 1♀; - Karadeniz Ereğlisi, 3.9.2001, 1♀.

General Distribution: Palaearctic: Albania, Austria, Belgium, Bulgaria, Caucasia, England, former Yugoslavia, France, Germany, Hungary, Italy, Russia, Spain, Tunisia, Turkey, Turkmenistan.

Hosts: Coleoptera: *Sphenoptera laticollis* OL., *S. gossypii* KERR., *S. montana* JAK., *Chrysobothris affinis* F. (Buprestidae), *Plagionotus arcuatus* L., *Schinocerus speciosus* AD. (Cerambycidae).

***Bracon (Bracon) subglaber* SZÉPLIGETI 1904**

Material examined: Bartın-Kurucasile-Danışment, 9.6.2002, 1♀. Bolu-Aladag-Kökeç, 27.8.2002, 1♀; - Karacasu-Gölcük, 26.8.2002, 1♀. Karabük-Safranbolu-Inceciy-Sariccek dagi, 4.9.2001, 1♂. Kastamonu-Daday-Sarpun, 29.8.2002, 2♀♀, 2♂♂; - Cide, 10.6.2002, 1♂. Sinop-Boyabat-Salar, 3.7.2001, 1♂; - Demirci, 3.7.2001, 1♀; - Yenice, 2.7.2001, 2♂♂, 1♀.

General Distribution: Palaearctic: Caucasia, Central Asia, Kazakhstan, Turkey, Western Europe.

Hosts: Lepidoptera: *Paranthrene tabaniformis* ROTT., *Pennisetia hylaeiformis* LASP. (Sesiidae), *Epichnopteryx sieboldi* ROTT. (Psychidae), *Aethes williana* BR. (Tortricidae), *Metzneria lappella* L. (Gelechiidae), *Urophora cardui* L., *U. solstitialis* L., *U.*

quadrifasciata MG., *Terellia serretulae* L., *Tephritis leontodontis* DEG., *Noeeta pupillata* FALL. (Tephritidae), Coleoptera: *Ceutorhynchus fairmairei* Cy. BRIS. (Curculionidae).

***Bracon (Bracon) trucidator* (MARSHALL 1888)**

Material examined: Cankiri-Cerkes, 4.7.2001, 1♀; - Ilgaz-Kale, 4.7.2001, 1♀. Karabük-Bostanbükü, 28.8.2002, 1♂; - Cay, 28.8.2002, 1♀; - Eskipazar-Ortaköy, 28.8.2002, 1♀, 2♂♂. Kirklareli-Kofcaz-Erikler, 2.8.2000, 2♂♂. Kastamonu-Hanönü, 2.7.2001, 1♀, 1♂; - Tosya-Ekinci, 31.8.2002, 6♀♀. Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 2♂♂; - Demirci, 7.9.2001, 1♀, 1♂; - Boyabat-Kozcagiz, 2.7.2001, 1♀; - Demirci, 7.9.2001, 1♀, 4♂♂; 11.6.2002, 2♂♂; - Yenice, 6.9.2001, 1♀. Zonguldak-Devrek, 29.6.2001, 1♀.

General Distribution: Palaearctic: Algeria, Austria, Caucasia, former Yugoslavia, Hungary, Italy, Rumania, Russia, Spain, Sweden, Turkey.

Hosts: Lepidoptera: *Metzneria lappella* L. (Gelechiidae).

Subgenus *CyanopteroBracon* TOBIAS 1957

***Bracon (CyanopteroBracon) illyricus* (MARSHALL 1888)**

Material examined: Sinop-Boyabat-Salar, 3.7.2001, 1♀; - Demirci, 3.7.2001, 1♂.

General Distribution: Palaearctic: Albania, Austria, former Yugoslavia, Hungary, Russia, Turkey.

Host: Coleoptera: *Larinus turbinatus* GYLL. (Curculionidae).

Subgenus *GlabroBracon* FAHRINGER 1927

***Bracon (GlabroBracon) angustiventris* TOBIAS 1957**

Material examined: Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 1♀.

General Distribution: Palaearctic: Azerbaijan, Kazakhstan, Russia, Turkey, Turkmenistan.

***Bracon (GlabroBracon) anthracinus* (NEES VON ESENBECK 1834)**

Material examined: Bolu-Mengen-Kiyaslar, 28.6.2001, 1♂; - Siyamoglu, 28.6.2001, 1♀. Düzce-Kaynasli-Ücköprü, 27.6.2001, 2♀♀. Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 3♀♀, 1♂; - Cay, 28.8.2002, 1♀, 13.6.2002, 1♀; - Eskipazar-Ortaköy, 28.8.2002, 2♀♀. Kastamonu-Catören, 30.8.2002, 3♀♀, 1♂; - Akkaya, 31.8.2002, 1♀; - Ballidag, 29.8.2002, 1♀; - Daday-Ballidag, 1580 m. 1.7.2001, 1♀; - Daday-Ballidag-Sarpun 1.7.2001, 1♀; - Daday-Incegiz, 1.7.2001, 1♀; - Ilgaz dagi- Catören, 3.7.2001, 2♀♀; - Arac-Akgecit, 28.6.2002, 1♂; - Küre-Ersizlerdere, 12.6.2002, 1♀, 1♂; - Küre-Ersizlerdere-Ipsinler, 12.6.2002, 1♀. Sinop-Boyabat-Çangal dagi-Kozcagiz, 2.7.2001, 3♀♀, 1♂; - Boyabat-Salar, 3.7.2001, 1♀; - Boyabat-Çangal dagi-Avdullu, 2.7.2001, 1♀; - Boyabat-Çangal dagi-Kozcagiz, 2.7.2001, 1♂; - Demirci, 11.6.2002, 1♀. Zonguldak-Karadeniz Ereglisi, 8.6.2002, 1♀.

General Distribution: Palaearctic: Austria, Azerbaijan, Belgium, Caucasia, China, England, former Yugoslavia, France, Germany, Greece, Hungary, Italy, Kazakhstan, Mongolia, Poland, Russia, Spain, Sweden, Turkey, Turkmenistan.

Hosts: Coleoptera: *Miarus campanulae* L., *Hylobius piceus* DEG. (Curculionidae), Lepidoptera: *Laspeyresia strobilella* L. (Tortricidae), Diptera: *Urophora cuspidata* MG. (Tephritidae).

***Bracon (Glabrobracon) atrator* (NEES VON ESENBECK 1834)**

Material examined: Bolu-Siyamoglu, 28.6.2001, 1♀, 1♂. Karabük-Cay, 13.6.2002, 1♂; - Safranbolu-Inceyay-Saricicek dagi, 29.6.2001, 3♂♂, 2♀♀; - Eskipazar-Ortaköy, 28.8.2002, 1♀. Kastamonu-Akkaya, 31.8.2002, 1♀; - Catalzeytin-Köprüköy, 10.6.2002, 1♀; - Daday-Ballidag, 1950 m. 1.7.2001, 2♀♀, 1♂; - Daday-Ballidag- Kelebek yaylasi 1.7.2001, 1♀; - Daday-Ballidag-Sarpun, 1.7.2001, 4♀♀, 2♂♂; - Tosya-Ekinci, 31.8.2002, 1♀; - Küre-Ersizlerdere, 12.6.2002, 1♀, 4♂♂; - Ilgazdağı-Catören, 3.7.2001, 1♀, 1♂. Sinop-Boyabat-Kozcagiz, 2.7.2001, 1♀, 4♂♂; - Kaba, 11.6.2002, 1♀; - Küre-Ikizciler, 12.6.2002, 6♀♀; - Yenicam, 6.9.2001, 3♀♀. Zonguldak-Ilksu, 8.6.2002, 1♀.

General Distribution: Palaearctic: Austria, Belgium, Central Asia, England, Finland, former Yugoslavia, France, Germany, Holland, Hungary, Italy, Kazakhstan, Russia, Spain, Sweden, Turkey.

Hosts: Coleoptera: *Gymnetron villosulum* GYKK., *Apion buddebergi* BED. (Curculionidae), Diptera: *Tephritis separata* RD., *T. conura* LW. (Tephritidae), *Phytobia flavifrons* MG. (Agromyzidae), Lepidoptera: *Coleophora coronillae* Z. (Coleophoridae).

***Bracon (Glabrobracon) bilgini* BEYARSLAN 2002**

Material examined: Kastamonu-Arac-Toprakcuma, 13.6.2002, 1♀, 1♂; - Küre-Ersizlerdere, 12.6.2002, 1♀.

General Distribution: Palaearctic: Turkey.

***Bracon (Glabrobracon) ciscaucasicus* TELENGA 1936**

Material examined: Zonguldak-Devrek-Davulga, 29.6.2001, 1♀.

General Distribution: Palaearctic: Azerbaijan, Caucasia, Crimea, Kazakhstan, Kirghizistan.

New record for Turkey.

***Bracon (Glabrobracon) dolichurus* MARSHALL 1897**

Material examined: Cankiri-Cerkes, 4.7.2001, 1♀.

General Distribution: Palaearctic: Hungary, Rumania.

New record for Turkey.

***Bracon (Glabrobracon) epitriptus* MARSHALL 1885**

Material examined: Zonguldak-Devrek, 28.6.2001, 1♀; - Devrek-Davulga, 29.6.2001, 1♀.

General Distribution: Palaearctic: Baltic, Caucasia, Kazakhstan, Western Europe.

Hosts: Coleoptera: *Iteomyia capreae* WINN. (Cecidomyiidae), *Agromyza flaviceps* FALL. (Agromyzidae), *Cryptorhynchus lapathi* L. (Curculionidae).

New record for Turkey.

***Bracon (Glabrobracon) fadiche* BEYARSLAN 1996**

Material examined: Bolu-Aladag-Kökez, 27.8.2002, 1♀. Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 2♀♀; - Safranbolu-Incecay-Saricicek dagi, 4.9.2001, 1♂. Kastamonu-Küre-Ersizlerdere, 12.6.2002, 1♀; - Daday-Ballidag, 29.8.2002, 1♀; - Catalzeytin-Köprüköy, 10.6.2002, 1♀; - Kanlıgöl, 28.8.2002, 1♀. Sinop-Demirci, 3.7.2001, 1♀; - Boyabat-Kozcagiz, 2.7.2001, 1♀; - Boyabat-Yabanlı, 7.9.2001, 1♂; - Yenicam, 6.9.2001, 1♀, 2♂♂.

General Distribution: Palaearctic: Turkey.

***Bracon (Glabrobracon) fumipennis* (THOMSON 1892)**

Material examined: Kastamonu-Hanönü, 2.7.2001, 1♀, 1♂; - Ilgazdağı-Catören, 3.7.2001, 1♀.

General Distribution: Palaearctic: Austria, Finland, former Yugoslavia, France, England, Sweden, Hungary, Poland, Russia, Turkey.

Hosts: Diptera: *Tephritis pulchra* Lw., *Chaetostomella cylindrica* R.-D., *C. onotrophes* Lw. (Tephritidae).

***Bracon (Glabrobracon) larvicida* (WESMAEL 1838)**

Material examined: Bartın, 9.6.2002, 1♀. Bolu-Aladag-Kökez, 27.8.2002, 1♀. Cankiri-Ilgaz-Derbent Motel, 30.8.2002, 8♀♀, 2♂♂. Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1♀. Kastamonu-Catören, 30.8.2002, 1♀, 1♂; - Daday-Ballidag-Sarpun, 1.7.2001, 1♀; - 29.8.2002, 1♀; - Ilgaz dagi, 1850-2100m., 20.8.2002, 1♀; - Küre-Ersizlerdere-Ipsinler, 12.6.2002, 5♀♀, 1♂. Sinop-Ayancik, 6.9.2001, 1♀.

General Distribution: Palaearctic: Austria, Belgium, former Yugoslavia, France, England, Italy, Hungary, Central Asia, Rumania, Turkey.

***Bracon (Glabrobracon) lividus* TELENGA 1936**

Material examined: Bolu-Aladag-Kökez, 27.8.2002, 1♀; - Aladag-Serif Yüksel Araş.Ormanı, 27.8.2002, 1♀. Cankiri-Ilgaz-Derbent Motel, 30.8.2002, 1♀. Kastamonu-Azdavay-Kayabogazi, 5.9.2001, 1♀; - Arac-Akgeci, 28.6.2002, 1♀, 3♂♂; - Catören, 30.8.2002, 1♀; - Hanönü, 2.7.2001, 1♀; 6.9.2001, 1♂; - Ballidag, 29.8.2002, 2♀♀; - Daday-Incegiz Ciftlik, 29.8.2002, 1♂; - Ilgaz dagi-Catören, 3.7.2001, 1♀. Karabük-Bostanbükü, 28.8.2002, 1♀, 1♂; - Cay, 28.8.2002, 1♀, 1♂; - Eskipazar-Ortaköy, 28.8.2002, 1♂. Sinop-Boyabat-Salar, 3.7.2001, 1♀; - Yenicam, 2.7.2001, 1♀, 1♂; 6.9.2001, 1♀, 1♂.

General Distribution: Palaearctic: Armenia, Caucasia, Turkey.

***Bracon (Glabrobracon) macrurus* THOMSON 1892**

Material examined: Kastamonu-Küre-Ersizlerdere, 12.6.2002, 1♀.

General Distribution: Palaearctic: Caucasia, Northern Europe.

Host: Coleoptera: *Anthonomus pomorum* L. (Curculionidae).

New record for Turkey.

***Bracon (Glabrobracon) nigripilosus* TOBIAS 1957**

Material examined: Sinop-Kabah, 7.9.2001, 1♀; - Küre-İkizciler, 12.6.2002, 2♀♀; - Yenicam, 6.9.2001, 2♀♀.

General Distribution: Palaearctic: SSSR.

New record for Turkey.

***Bracon (Glabrobracon) obscurator* (NEES VON ESENBECK 1812)**

Material examined: Bolu-Caydurt, 28.6.2001, 1♂. Cankiri-Ilgaz-Derbent Motel, 30.8.2002, 6♀♀, 2♂♂. Corum-Kargi, 31.8.2002, 1♂. Düzce-Ücköprü-Kaynasli, 27.6.2001, 2♀♀. Kastamonu-Daday-Ballidag-Sarpun, 1.7.2001, 1♀; - Kanlıgöl-M. Parki, 28.8.2002, 2♀♀; - Akkaya 31.8.2002, 1♀; - Daday-Ballidag-Sarpun, 29.8.2002, 2♀♀; - Daday-Incegiz, 1.7.2001, 1♂; - Catören, 30.8.2002, 3♀♀; - Catalzeytin-Köprüköy, 10.6.2002, 1♀; - Ilgazdağı-Catören, 3.7.2001, 1♀; - Hanönü, 6.9.2001, 3♀♀; - Küre-Ersizlerdere-Ipsinler, 12.06.2002, 3♀♀, 1♂. Karabük-Eskipazar-Ortaköy, 28.8.2002, 3♀♀; - Cay, 28.8.2002, 1♀; - Bostanbükü, 28.8.2002, 1♀. Sinop-Kabali, 11.6.2002, 1♀; - Yenicam, 2.7.2001, 1♂. Zonguldak-Caycuma-Yolgecen, 9.6.2002, 1♂.

General Distribution: Palaearctic: Austria, Azerbaijan, Belgium, Caucasia, Central Asia, China, Denmark, England, former Czechoslovakia, Finland, former Yugoslavia, Germany, Hungary, Italy, Kazakhstan, Poland, Rumania, Russia, Siberia, Spain, Sweden, Turkey.

Hosts: Lepidoptera: *Homoeosoma sinuellum* F. (Phycitidae), *Epermenia fulviguttella* Z. (Epermeniidae), *Coleophora caespitiella* Z. (Coleophoridae), Coleoptera: *Trachys pumila* ILL., *T. troglodytes* GYLL. (Buprestidae), *Orthotomicus suturealis* GYLL., *Hylesinus fraxini* PANZ., *Ips typographus* L. (Scolytidae).

***Bracon (Glabrobracon) osculator* (NEES VON ESENBECK 1812)**

Material examined: Bolu-Siyamoglu, 28.6.2001, 1♂. Cankiri-Ilgaz-Kale, 4.7.2001, 1♂.

Kastamonu-Daday-Ballidag, 1.7.2001, 1♀; - Hanönü, 2.7.2001, 1♀, 1♂; - Ilgaz dagi, Catören, 3.7.2001, 1♂; - Arac-Toprakcuma, 13.6.2002, 1♀; - Tasköprü-Alamasisli, 2.7.2001, 1♂. Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 3♀♀, 1♂; - Boyabat-Salar, 3.7.2001, 1♀. Zonguldak-Devrek, 28.6.2001, 1♀.

General Distribution: Palaearctic: Austria, Azerbaijan, Belgium, Caucasia, Denmark, England, Finland, former Yugoslavia, France, Germany, Holland, Hungary, Italy, Mongolia, Poland, Rumania, Russia, Siberia, Sweden, Turkey.

Hosts: *Coleophora* sp. (Coleophoridae).

***Bracon (Glabrobracon) paucis* BEYARSLAN 1996**

Material examined: Karabük-Safranbolu-Incecey-Saricicek dagi, 29.6.2001, 2♀♀.

General Distribution: Turkey.

***Bracon (Glabrobracon) picticornis* (WESMAEL 1838)**

Material examined: Corum-Kargi, 31.8.2002, 3♀♀. Kastamonu-Arac-Akgecit, 28.6.2002, 1♂; - Catalzeytin-Köprüköy, 10.6.2002, 1♀; - Ilgazdağı-Catören, 3.7.2001, 3♀♀, 1♂; - Hanönü, 2.7.2001, 2♀♀; - Azdavay-Mehmetcebebi, 5.8.2001, 1♂. Sinop-Boyalı, 11.6.2002, 1♂; - Boyabat-Kozcagiz, 2.7.2001, 1♀; - Boyabat-Salar, 3.7.2001, 2♂♂; - Yenicam, 6.9.2001, 1♀. Zonguldak-Devrek-Davulga, 29.6.2001, 1♂.

General Distribution: Palaearctic: Afghanistan, Austria, Belgium,

England, Finland, former Yugoslavia, France, Germany, Holland, Hungary, Italy, Kazakhstan, Poland, Russia, Sweden, Turkey.

H o s t s : Lepidoptera: *Pontania viminalis* L., *P. vesicator* BREMI, *P. proxima* LEP., *P. peduncul* HTG., *Nematus bipartitus* LEP., *N. salicis* L. (Tenthredinidae), *Cochylis pallidana dolosana* KENN. (Tortricidae). Coleoptera: *Plagionotus arcuatus* L., *Cyltus* sp. (Cerambycidae),

***Bracon (Glabrobracon) pineti* THOMSON 1892**

M a t e r i a l e x a m i n e d : Bolu-Siyamoglu, 28.6.2001, 2 ♀ ♀. Kastamonu-Ballidag 1600-1740m, 29.8.2002, 2 ♀ ♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Caucasia, Central Asia, Eastern Siberia, Kazakhstan, Western Europe.

H o s t s : Lepidoptera : *Laspeyresia strobilella* L. (Tortricidae). Coleoptera : *Ernobius abietis* F., *E. abietinus* GYLL., *E. nigrinus* STURM., *E. longicornis* STURM. (Anobiidae).

New record for Turkey.

***Bracon (Glabrobracon) planinotus* TOBIAS 1957**

M a t e r i a l e x a m i n e d : Bolu-Siyamoglu, 28.6.2001, 3 ♀ ♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Kazakhstan, Turkey.

***Bracon (Glabrobracon) popovi* TELENGA 1936**

M a t e r i a l e x a m i n e d : Bolu-Siyamoglu, 28.6.2001, 1 ♂, 1 ♀. Kastamonu-Daday-Ballidag-Sarpun, 1.7.2001, 1 ♀; - Arac-Akgecit, 28.6.2002, 1 ♀; - Ilgazdağı-Catören, 3.7.2001, 4 ♀ ♀. Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1 ♀. Sinop-Boyabat-Kozcagiz, 2.7.2001, 2 ♀ ♀; - Demirci, 3.7.2001, 1 ♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Central Asia, Kazakhstan, Russia, Turkey.

***Bracon (Glabrobracon) praetermisus* MARSHALL 1885**

M a t e r i a l e x a m i n e d : Kastamonu-Daday-Ballidag, 1.7.2001, 2 ♀ ♀; - Küre-Ersizlerdere-Ipsinler, 12.6.2002, 1 ♂; - Daday-Sarpun, 29.8.2002, 1 ♀, - Ballidag, 29.8.2002, 1 ♂; - Ilgaz dagi, 30.8.2002, 1 ♀; Arac-Toprakcuma, 13.6.2002, 1 ♂.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Caucasia, Kazakhstan, Southern Siberia, Western Europe.

H o s t s : *Cochylis posterans* Z., *C. roseana* HW. (Tortricidae); *Nepticula hanoverella* GLITZ. (Nepticulidae), *Aristotelia brizella* TR. (Gelechiidae); Diptera: *Noeeta pupillata* FALL. (Tephritidae); Hymenoptera: *Biorhiza pallida* OL. (Cynipidae), *Cephus pygmaeus* L. (Cepidae); Coleoptera: *Orthotomicus proximus* EICHH. *O. laricis* F. *O. suturalis* GYLL. (Scolytidae).

New record for Turkey.

***Bracon (Glabrobracon) variator* (NEES VON ESENBECK 1812)**

Material examined: Kastamonu-Daday-Incegiz, 1.7.2001, 1♂. Bartın, 9.6.2002, 2♀; - Camlık, 30.6.2001, 2♀. Bolu-Aladag-Kökeç, 27.8.2002, 1♀; - Aladag-Serif Yüksel Araş. Orm., 27.8.2002, 2♀; - Siyamoglu, 28.6.2001, 1♀. Cankiri-Ilgaz-Derbent Motel, 30.8.2002, 1♀; - Ilgaz-Kale, 4.7.2001, 1♀, 1♂. Düzce-Kaynasli-Üçköprü, 27.6.2001, 3♂; Karabük-Eskipazar-Ortaköy, 28.8.2002, 1♀; - Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1♀. Kastamonu-Ilgaz dagi-Catören, 3.7.2001, 1♀; - Küre-Ersizlerdere, 12.6.2002, 1♀; - Daday-Incegiz, 1.7.2001, 2♀, 1♂; - Daday-Incegiz-Ciftlik, 29.8.2002, 1♀; - Daday-Ballidag, 1500-1700 m., 29.8.2002, 1♀; - Hanönü, 6.9.2001, 2♀, 1♂; - Kanlıgöl Milli Parki, 28.8.2002, 1♀, 1♂. Sinop-Ayancik-Bakirlizaviye, 6.9.2001, 1♀; - Akkaya, 31.8.2002, 1♀; - Boyabat-Kozcagiz, 2.7.2001, 2♀; - Boyabat-Salar, 3.7.2001, 1♂; - Boyabat-Yabanlı, 7.9.2001, 1♀; - Yenicam, 6.9.2001, 1♀.

General Distribution: Palaearctic: Austria, Belgium, Central Asia, China, Crimea, England, Finland, former Czechoslovakia, former Yugoslavia, France, Germany, Holland, Hungary, Iran, Italy, Mongolia, Poland, Rumania, Russia, Spain, Sweden, Turkey.

Hosts: Lepidoptera: *Platyedra subcinerea* HW., *Pexicopia malvella* HB., *Mesophleps corsicellus* Y.-S. (Gelechiidae), *Hadena bicruris* HFN. (Noctuidae), *Lithocolletis mespilella* HB. (Gracillariidae), *Aegeria andrenaeformis* LASP. (Sesiidae), *Coleophora medelichennis* KR., *C. coronillae* Z. (Coleophoridae), *Grapholitha funebrana* TR., *G. dorsana* F., *Barbara herrichiana* OBR., *Pandemis cerasana* HB., *Petrova resinella* L., *Laspeyresia strobilella* L., *eucosma cana* HW. (Tortricidae), *Etiella zinckenella* TR., *Dioryctria abietella* DEN. & SCHIFF., *Myelois cribrella* HB. (Phycitidae), Coleoptera: *Ernobius nigrinus* STURM. (Anobiidae), *Larinus turbinatus* GYLL., *L. jaceae* F., *Anthonomus pomorum* L., *Sibinia viscaria* L., *Pissodes validirostris* GYLL., *Baris cupirostris* F., *B. laticollis* MARSY., *B. chlorisans* GERM., *Magdalis rufa* GERM., *Gymnetron tetrum* L., *G. asellus* GRAV., *Miarus campanulae* L., *Sitona longulus* GYLL., *Ceutorhynchus punctiger* GYLL. (Curculionidae), *Bruchus laticollis* BOY., *B. lentis* FROL., *B. viciae* OL., *B. atomarius* L., *Bruchidius lividiamanus* GYLL., *B. poupillieri* ALL. (Bruchidae), Diptera: *Pegohylemyia seneciella* MEADE (Anthomyiidae), *Noeeta pupillata* FALL., *Chaetostomella cylindrica* R.-D., *Tephritis leontodontis* DEG., *Sphenella marginata* FALL. (Tephritidae); *Hoplocampa brevis* KLUG, Hymenoptera: *Y. flava* L. (Tenthredinidae).

Subgenus *Habrobracon* ASHMEAD 1895***Bracon (Habrobracon) hebetor* (SAY 1836)**

Material examined: Karabük-Safranbolu, 4.9.2001, 1♀, 3♂. Kastamonu-Hanönü, 6.9.2001, 34♀, 33♂; - Azdavay-K.boğazi, 5.9.2001, 3♀. Sinop-Boyabat-Yabanlı, 7.9.2001, 4♀, 1♂; - Kabalı, 7.9.2001, 2♀; - Yenicam, 6.9.2001, 1♀, 2♂; Zonguldak-Cukurören, 9.6.2002, 1♀.

General Distribution: Etiopic: Indo-Austria, Nearctic, Neotropic, Palaearctic (including Turkey)

Hosts: Lepidoptera: *Ephestia*, *Plodia* and *Galleria* species; in fields parasitizes manyhosts, mostly lepidopterans of different families [*Ostrinia nubilalis* HB., *Pexicopia malvella* HB., *Etiella zinckenella* TR., *Helicoverpa armigera* HB., *Heliothis peltigera* DEN. & SCHIFF. (Phycitidae)].

***Bracon (Habrobracon) nigricans* (SZÉPLIGETI 1901)**

Material examined: Kastamonu-Küre-Ersizlerdere-Ipsinler, 12.6.2002, 1 ♀, 1 ♂; - Arac-Toprakcuma, 13.6.2002, 1 ♂.

General Distribution: Palaearctic: Asia, China, Hungary, Mongolia, Russia, Turkey.

Hosts: Lepidoptera: *Etiella zinckenella* TR. (Phycitidae), *Pexicopia malvella* HB. (Gelechiidae), *Cnebhasia sedana* CONTS. (Tortricidae).

***Bracon (Habrobracon) radialis* TELENGA 1936**

Material examined: Sinop-Boyalı, 11.6.2002, 2 ♀♀.

General Distribution: Palaearctic: Austria, Central Asia, Kazakhstan, Mongolia, Turkey, Western Russia.

Host: Lepidoptera: *Plutella maculipennis* CURT. (Plutellidae).

***Bracon (Habrobracon) variegator* (SPINOLA 1808)**

Material examined: Bolu-Mengen-Kiyaslar, 28.6.2001, 1 ♀. Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1 ♀. Kastamonu-Daday-Ballidag-Sarpun, 1.7.2001, 1 ♀. Zonguldak-Cukurören, 9.6.2002, 1 ♀; - Karadeniz Ereğlisi, 8.6.2002, 1 ♀.

General Distribution: Palaearctic: Austria, Belgium, China, England, Finland, former Yugoslavia, France, Russia, Germany, Hungary, Italy, Poland, Rumania, Siberia.

Hosts: Lepidoptera: *Tortrix viridana* L., *Laspeyresia strobilella* L., *Archips rosana* L. (Tortricidae); *Recurvaria nanella* DEN. & SCHIFF., *Anarsia lineatella* Z., *Teleia modesta* D. (Gelechiidae); *Endrosis sarcitrella* L., *Agonopterix propinquella* TR. (Oecophoridae); *Acrobasis obtusella ottomana* CAR., *Hyphantidium terebrellum* ZK. (Phyciidae); *Coleophora ibipennella* Z. (Coleophoridae); *Lithocolletis mespilella* HB., *L. kleemanella* F. (Gracillariidae); *Yponomeuta padellus* L. (Yponomeutidae), Coleoptera: *Ernobius abietis* F. (Anobiidae).

Subgenus *Lucobracon* FAHRINGER 1927

***Bracon (Lucobracon) brevitemporalis* TOBIAS 1959**

Material examined: Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 2 ♀♀. Kastamonu-Daday-Ballidag, 1.7.2001, 1 ♀. - Arac-Akgecit, 28.6.2002, 1 ♀, 1 ♂.

General Distribution: Palaearctic: Kazakhstan.

New record for Turkey.

***Bracon (Lucobracon) erraticus* (WESMAEL 1838)**

Material examined: Bartın, 9.6.2002, 1♀, 2♂♂; - Camlık, 30.6.2001, 1♂. Bolu-Caydurt, 28.6.2001, 1♀; - Mengen-Kiyaslar, 28.6.2001, 1♀. Cankiri-Cerkes, 4.7.2001, 1♂. Karabük-Safranbolu-Incecey-Saricicek dagi, 29.6.2001, 1♂; Karabük-Bostanbükü, 13.6.2002, 2♀♀; Kastamonu-Daday-Incegiz, 1.7.2001, 1♀; - Daday-Ballidag, 1.7.2001, 1♂; 29.8.2002, 1♀; - Daday-Ballidag-Sarpun, 1.7.2001, 2♀♀, 3♂♂; - Ilgaz dagi-Catören, 3.7.2001, 2♂♂; 30.8.2002, 1♀, - Inebolu-Yakaboyu, 10.6.2002, 1♂; Arac-Akgecit, 28.6.2002, 2♀♀, 1♂; - Küre-Ayrancı, 12.6.2002, 1♀; - Küre-Ersizlerdere, 12.6.2002, 2♂♂. Sinop-Ayancik-Bakirlizaviye, 2.7.2001, 1♂; - Boyabat-Salar, 3.7.2001, 1♀; - Boyabat-Çangaldağı-Kozcagiz, 2.7.2001, 1♀; - Kabalı, 3.7.2001, 1♀, 3♂♂; 11.6.2002, 1♂; - Yenicam, 2.7.2001, 2♀♀. Zonguldak-Caycuma-Yolgecen, 9.6.2002, 1♂; - Devrek-Davulga, 29.6.2001, 1♂; - Karadeniz Ereglisi, 8.6.2002, 3♂♂.

General Distribution: Palaearctic: Austria, Belgium, Caucasus, England, former Yugoslavia, Germany, Hungary, Kazakhstan, Lithuania, Poland, Russia, Spain, Sweden, Switzerland, Turkey.

Hosts: Coleoptera: *Phaedon cochleariae* F., *Gastroidea viridula* DEG., *Phyllotreta nemorum* L. (Chrysomelidae) Lepidoptera: *Coleophora laricella* HB., *C. Lutipennella* Z. (Coleophoridae); *Metzneria lapella* L. (Gelechiidae), *Chaetostomella cylindrica* R.-D., *Urophora eriolepidis* Lw., *Terellia serratulae* L. (Tephritidae); *Acleris rhombana* DEN. & SCHIFF. (Tortricidae); *Pennisetia hylaeiformis* LASP. (Sesiidae).

***Bracon (Lucobracon) fortipes* WESMAEL 1838**

Material examined: Kastamonu-Daday-Sarpun, 29.8.2002, 1♀.

General Distribution: Palaearctic: Belgium, France, Germany, Hungary, Italy, Poland, Yugoslavia.

New record for Turkey.

***Bracon (Lucobracon) grandiceps* (THOMSON 1892)**

Material examined: Kastamonu-Daday-Sarpun, 29.8.2002, 1♀.

General Distribution: Palaearctic: Turkey, Western Europe.

***Bracon (Lucobracon) humidus* TOBIAS 1976**

Material examined: Kastamonu-Cide, 10.6.2002, 1♀. Bolu-Siyamoglu, 28.6.2001, 1♀.

General Distribution: Palaearctic: Black Sea coast of Caucasus.

New record for Turkey.

***Bracon (Lucobracon) hungaricus* (SZÉPLIGETI 1896)**

Material examined: Sinop-Boyabat-Çangal dağı- Kozcagiz, 2.7.2001, 1♀.

General Distribution: Palaearctic: former Yugoslavia, Hungary, Russia, Turkey.

***Bracon (Lucobracon) meyeri* (TELENGA 1936)**

Material examined: Cankiri-Ilgaz dagi-Derbent Motel, 30.8.2002, 1 ♀.

General Distribution: Palaearctic: Kazakhstan, Mongolia, Russia, Yakutia.

New record for Turkey.

***Bracon (Lucobracon) nigriventris* (WESMAEL 1838)**

Material examined: Bartın-Kurucasile-Danishment, 9.6.2000, 1 ♀; Bolu-Aladag-Çebni Yaylasi, 27.8.2002, 1 ♀; - Gerede-Güney, 13.6.2002, 1 ♀; Kastamonu-Arac-Akgecit, 28.6.2002, 1 ♀, 2 ♂ ♂; - Daday-Ballidag, 1.7.2001, 1 ♀, 4 ♂ ♂; - Catören, 30.8.2002, 2 ♂ ♂;

General Distribution: Palaearctic: Caucasus, Central Asia, Kazakhstan, Mongolia, Russia, Western Europe.

Hosts: Coleoptera: *Pissodes pini* L. *Hylobius piceus* DEG. (Curculionidae); *Plagionotus floralis* PALL. (Cerambycidae).

New record for Turkey.

***Bracon (Lucobracon) punctithorax* TOBIAS1959**

Material examined: Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1 ♀; Kastamonu-Arac-Akgecit, 28.6.2002, 1 ♀, 1 ♂; Kastamonu-Daday-Ballidag, 1.7.2001, 1 ♀, 1 ♂; Kocaeli-Uzuntarla, 7.7.1993, 1 ♀.

General Distribution: Palaearctic: Kazakhstan.

New record for Turkey.

***Bracon (Lucobracon) suchorukovi* (TELENGA 1936)**

Material examined: Karabük-Cay, 28.8.2002, 1 ♀, Kastamonu-Ilgaz dagi, 30.8.2002, 1 ♀,

General Distribution: Palaearctic: Austria, Caucasus, Kazakhstan, Russia, Ukraine.

***Bracon (Lucobracon) thuringiacus* (SCHMIEDEKNECHT 1896)**

Material examined: Kastamonu-Küre-Ersizlerdere-Ipsinler, 12.6.2002, 1 ♀

General Distribution: Palaearctic: former Yugoslavia, Germany.

New record for Turkey.

***Bracon (Lucobracon) triangularis* (NEES VON ESENBECK 1834)**

Material examined: Istanbul-Bahçekoy-Bilezikçiftliği, 24.6.1993, 1 ♀.

General Distribution: Palaearctic: Western Europe.

Host: Lepidoptera: *Aegeria tipuliformis* CL. (Sesiidae).

New record for Turkey.

Subgenus *R o s t r o b r a c o n* TOBIAS 1957

***Bracon (R o s t r o b r a c o n) urinator* (FABRICIUS 1798)**

M a t e r i a l e x a m i n e d : Bolu-Karacasu-Gölcük, 26.8.2002, 1♀; - Aladag-Kökez, 27.8.2002, 1♂. Cankiri-Ilgaz-Derbent Motel, 30.8.2002, 1♀; - Cerkes, 4.7.2001, 1♀. Karabük-Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1♂; - Eskipazar-Ortaköy, 28.8.2002, 2♂♂. Kastamonu-Daday-Ballidag-Kelebek yaylasi, 1.7.2001, 2♂♂; - Arac-Akgecit, 28.6.2002, 3♀♀, 1♂; - Akkaya, 31.8.2002, 1♀; - Daday-Incegiz-Ciftlik, 29.8.2002, 1♀; - Daday-Ballidag-Sarpun, 1.7.2001, 1♂. Sinop-Boyabat-Salar, 3.7.2001, 1♀; - Demirci, 3.7.2001, 1♂. Zonguldak-Devrek, 28.6.2001, 1♀, 3♂♂; 29.6.2001, 1♀; - Karadeniz Ereğlisi, 8.6.2002, 2♀♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Albania, Belgium, Central Asia, France, Germany, Greece, Holland, Hungary, India, Iran, Italy, Kazakhstan, Portekiz, Rumenia, Russia, Spain, Syria, Tajikistan, Turkey.

H o s t s : Coleoptera : *Rhyocyllus conicus* FRÖL., *R. latirostris* F., *Larinus sturnus* SCHALL., *L. saussureae* MARSY. (Curculionidae), *Tephritis pulchra* LW. (Tephritidae).

***Pigeria* ACHTERBERG 1985**

***Pigeria piger* (WESMAEL 1838)**

M a t e r i a l e x a m i n e d : Bartin-Camlık, 30.6.2001, 1♀. Bolu-Mengen-Kiyaslar, 28.6.2001, 2♀♀; - Siyamoglu, 28.6.2001, 1♀. Kastamonu-Daday-Ballidag, 1.7.2001, 1♀; - Hanönü, 2.7.2001, 1♂; - Ilgazdağı-Catören, 3.7.2001, 1♂, 1♀; - Ballidag, 29.8.2002, 1♀; - Daday-Sarpun, 29.8.2002, 1♀; - Arac-Toprakcuma, 13.6.2002, 1♀. Karabük-Bostanbükü, 13.6.2002, 1♀; - Cay, 28.8.2002, 1♀; - Safranbolu-Incecay-Saricicek dagi, 29.6.2001, 1♀; - Eskipazar-Ortaköy, 28.8.2002, 1♂. Sinop-Boyabat-Çangal dağı-Avdullu, 2.7.2001, 1♀; - Yeniceam, 2.7.2001, 2♀♀. Zonguldak-Caycuma-Kayıkçılar, 30.6.2001, 2♀♀.

G e n e r a l D i s t r i b u t i o n : Palaearctic: Austria, Belgium, England, former Czechoslovakia, France, Hungary, Italy, Japonya, Kazakhstan, Rumenia, Russia, Southern Caucasia, Turkey.

H o s t s : Lepidoptera : *Etiella zinckenella* TR. (Phycitidae), *Cochylis epilnana* DUP., *Cnephasia longana* HW. (Tortricidae).

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Zusammenfassung

Von der westlichen Schwarzmeerküste wurden 62 Braconinae der Gattungen *Glyptomorpha* HOLMGREN, *Pseudovipio* SZÉPLIGETI, *Vipio* LATREILLE, *Ceratobracon* TELENGA, *Bracon* FABRICIUS und *Pigeria* ACHTERBERG nachgewiesen. Alle angeführten Arten sind Erstnachweise für die Regionalfauna, 21 zudem neu für die Türkei.

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